Norfolk District, U.S. Army Corps of Engineers

Presentation to Governor McAuliffe

July 8th, 2015

Paul B. Olsen, P.E.
Colonel, U.S. Army
Commanding

US Army Corps of Engineers
BUILDING STRONG®

Three Levels of Effort

I. Tactical - Deliver the Program ($680 Million)
- Construction Program (Military, Civil Works, Other Gov't Agencies
- Regulatory Program

II. Operational - Port Modernization
- 55' + Southern Branch Deepening
- Craney Island Eastern Expansion (CIEE)
- Post Panamex Dredging

III. Strategic - Sea Level Rise and Climate Change (SLR/CC)
- North Atlantic Coast Comprehensive Study (NACCS)
- Whole of Government approach to SLR/CC
- Projects/Studies (Norfolk Comprehensive)

Tactical: Deliver the Program
"You May Have Heard of…"

Fort Belvoir Community Hospital

TRADOC Headquarters

Fort Picket Training Brigade

Langley Hospital Addition

Asymmetric Warfare Group Training Complex Fort A.P. Hill

Rivanna's Joint Use Intel Facilit

ANC's Columbarium 9

Our Award Winning DFACs

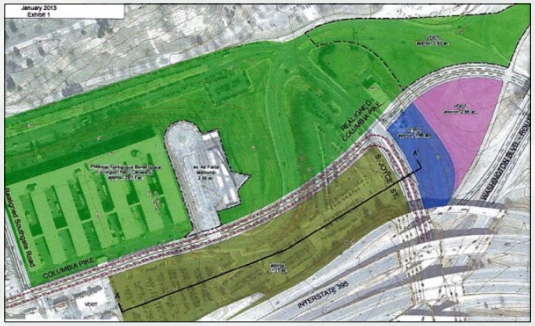
New and Modernized Barracks at Forts Eustis and Lee

“You will soon see…”

Flight Concepts Division Hanger at Fort Eustis

Millennium Expansion at Arlington National Cem

Clean Power Plant for Radford AAP



Southern Expansion at Arlington National Cemetery

NASA

$40M - $120M worth of facilities For NASA Langley Research Center

$34M Lynnhaven Tributary Restoration

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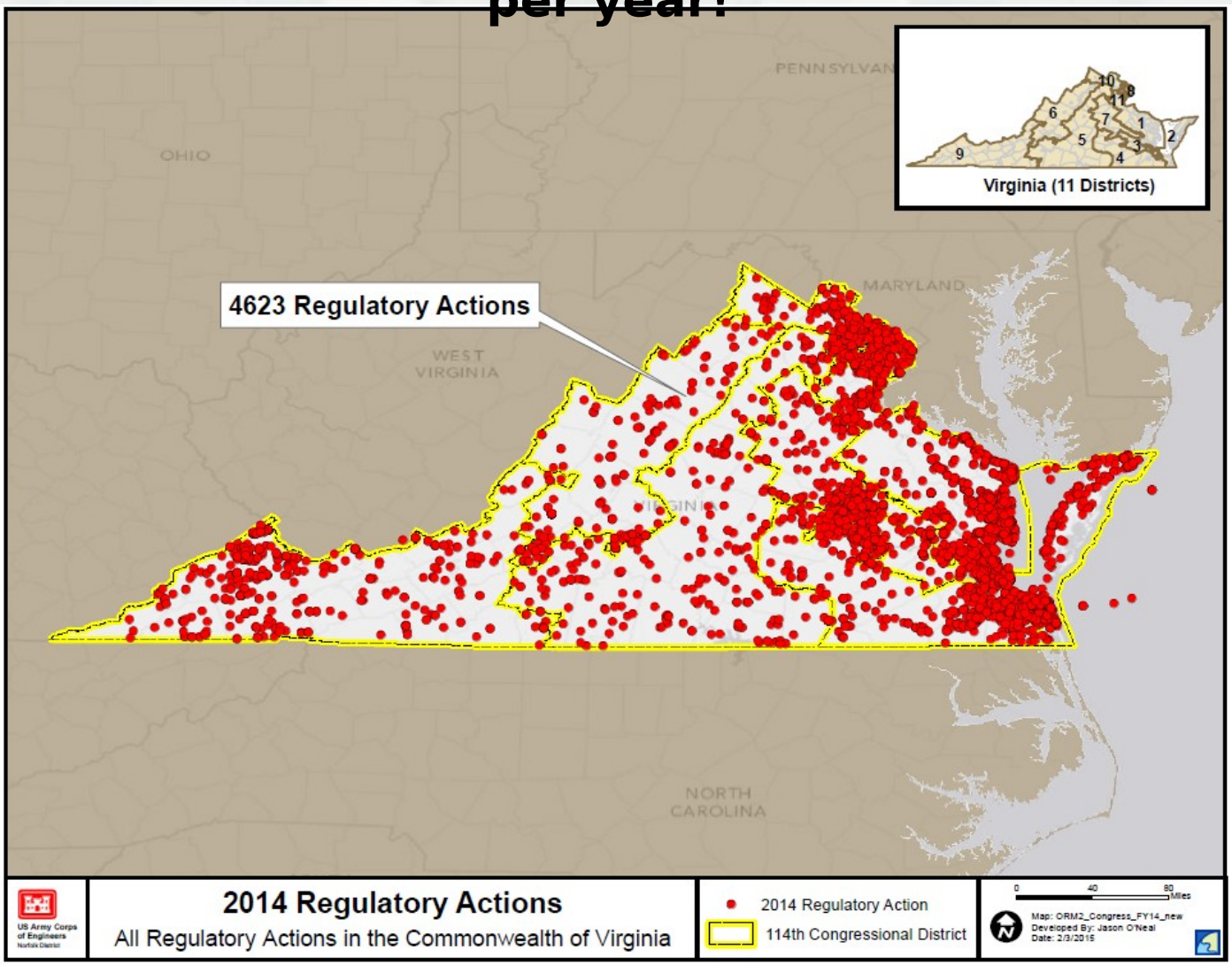
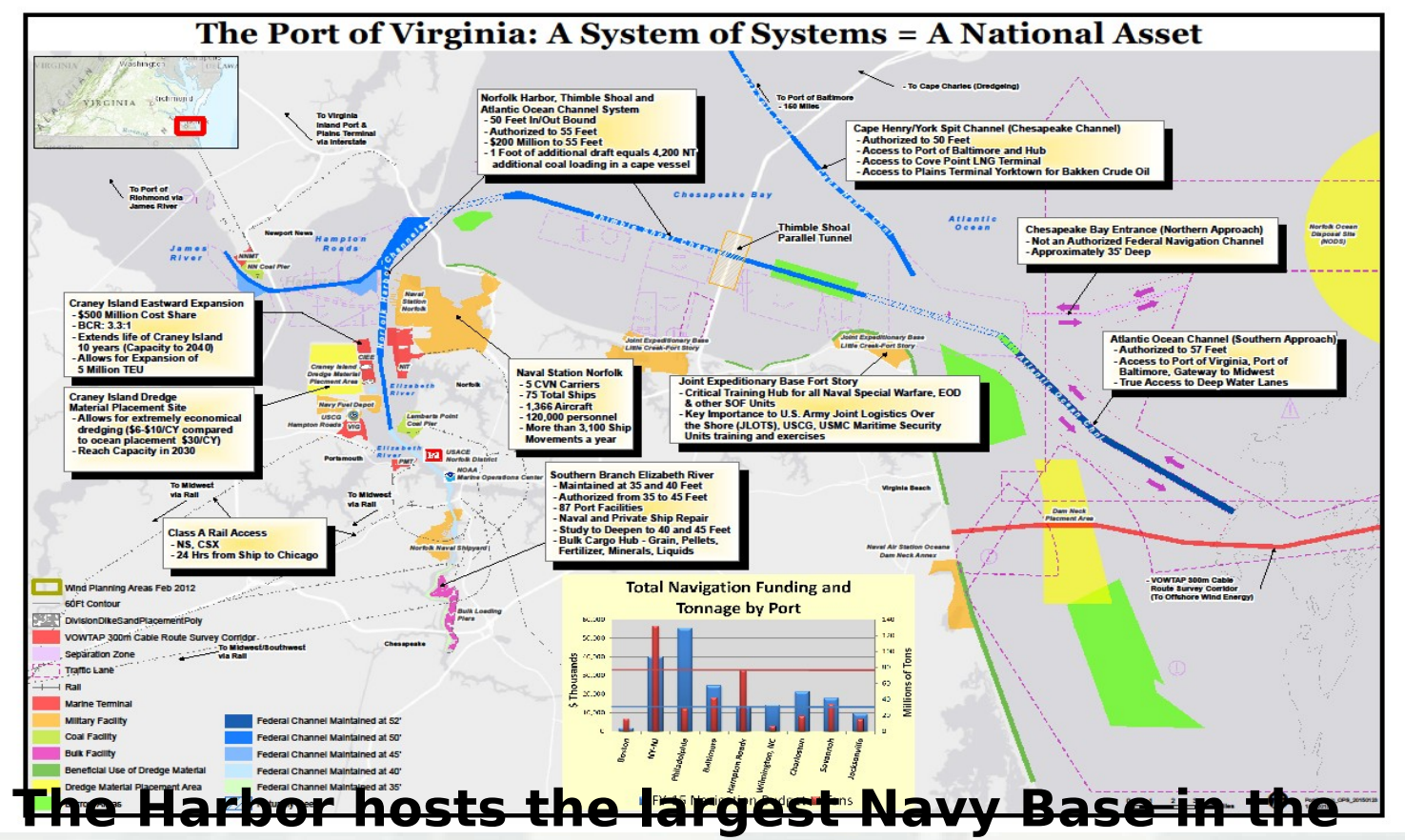
Tactical: Deliver the Program

Our Regulatory Program averages about 4000-5000 actions per year!



Operational: Port Modernization

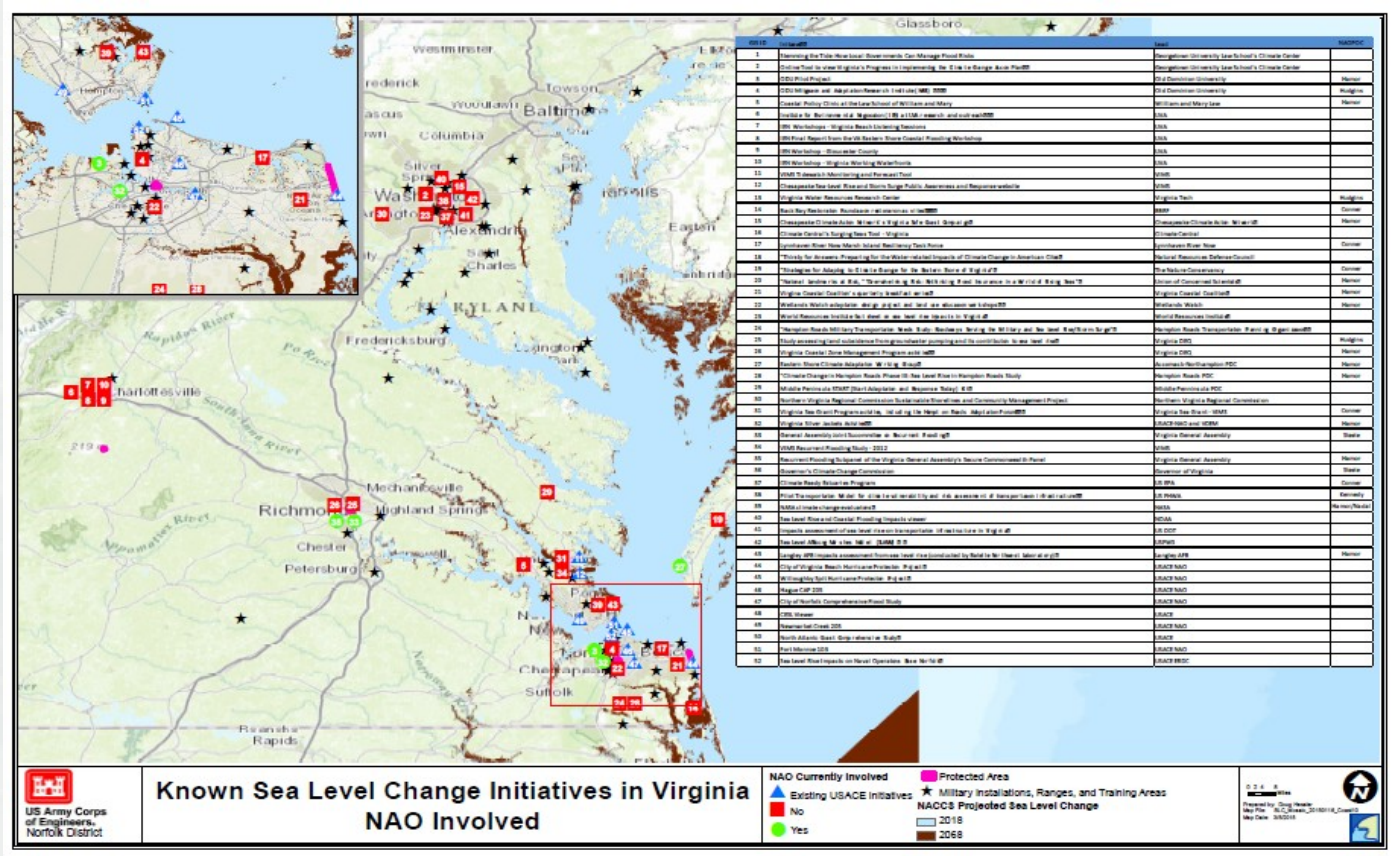
The top priority for the District is to get the Federal Channel to 55’


The Port of Virginia: A System of Systems = A National Asset
Norfolk Harbor, Thimble Shoal and Atlantic Ocean Channel System
- 50 Feet In/Out Bound
- Authorized to 55 Feet
- $200 Million to 55 Feet
- 1 Foot of additional draft equals 4,200 NT additional coal loading in a cape vessel
Cape Henry/York Spit Channel (Chesapeake Channel)
- Authorized to 50 Feet
- Access to Port of Baltimore and Hub
- Access to Cove Point LNG Terminal
- Access to Plains Terminal Yorktown for Bakken Crude Oil
Thimble Shoal Parallel Tunnel
Chesapeake Bay Entrance (Northern Approach)
- Not an Authorized Federal Navigation Channel
- Approximately 35' Deep
Craney Island Eastward Expansion
- $500 Million Cost Share
- BCR: 3.3:1
- Extends life of Craney Island 10 years (Capacity to 2040)
- Allows for Expansion of 5 Million TEU
Craney Island Dredge Material Placement Site
- Allows for extremely economical dredging ($6-$10/CY compared to ocean placement $30/CY)
- Reach Capacity in 2030
Naval Station Norfolk
- 5 CVN Carriers
- 75 Total Ships
- 1,366 Aircraft
- 120,000 personnel
- More than 3,100 Ship Movements a year
Joint Expeditionary Base Fort Story
- Critical Training Hub for all Naval Special Warfare, EOD & other SOF Units
- Key Importance to U.S. Army Joint Logistics Over the Shore (JLOTS), USCG, USMC Maritime Security Units training and exercises
Atlantic Ocean Channel (Southern Approach)
- Authorized to 57 Feet
- Access to Port of Virginia, Port of Baltimore, Gateway to Midwest
- True Access to Deep Water Lanes
Southern Branch Elizabeth River
- Maintained at 35 and 40 Feet
- Authorized from 35 to 45 Feet
- 87 Port Facilities
- Naval and Private Ship Repair
- Study to Deepen to 40 and 45 Feet
- Bulk Cargo Hub - Grain, Pellets, Fertilizer, Minerals, Liquids
Class A Rail Access
- NS, CSX
- 24 Hrs from Ship to Chicago
Total Navigation Funding and Tonnage by Port
$ Thousands
Millions of Tons
Boston
NY-NJ
Philadelphia
Baltimore
Hampton Roads
Wilmington, NC
Charleston
Savannah
Jacksonville
Wind Planning Areas Feb 2012
60Ft Contour
DivisionDikeSandPlacementPoly
VOWTAP 300m Cable Route Survey Corridor
Separation Zone
Traffic Lane
Rail
Marine Terminal
Military Facility
Coal Facility
Bulk Facility
Beneficial Use of Dredge Material
Dredge Material Placement Area
Federal Channel Maintained at 52'
Federal Channel Maintained at 50'
Federal Channel Maintained at 45'
Federal Channel Maintained at 40'
Federal Channel Maintained at 35'

The Harbor hosts the largest Navy Base in the World as well as being the Port of Choice for the Post Panamex Vessels. This is a sample of the complexity of the District’s efforts for a 55’ channel.

Strategic: Sea Level Rise (SLR)

Sea Level Rise and Climate Change are important because Hampton Roads has twice the relative sea level rise of any other East Coast Location



This demonstrates the complexity of the problem and the number of efforts ongoing to counter this clear and present challenge

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Holland Island, Tangier Island, Hampton Roads

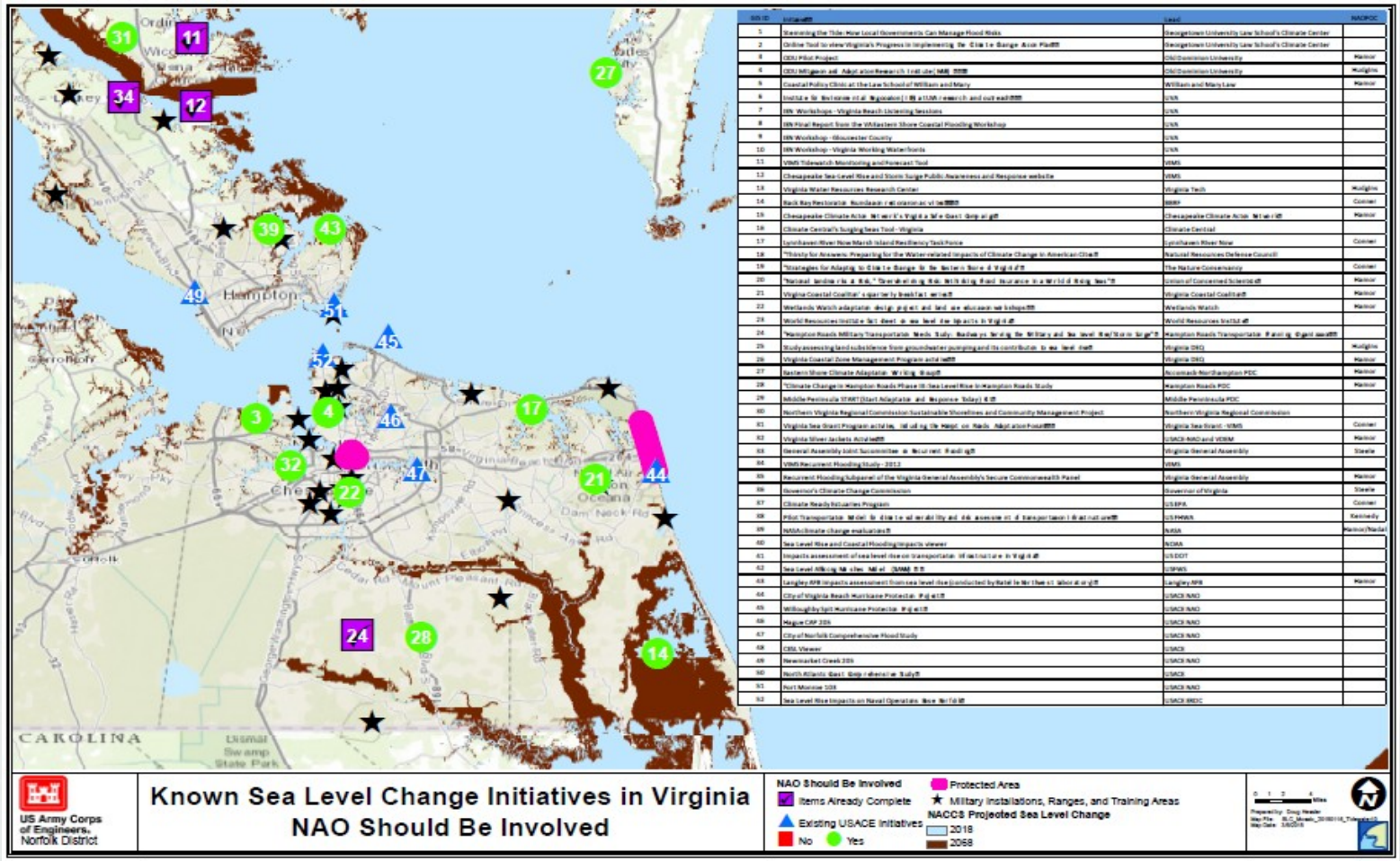
Holland Island

This last house shown collapsed in 2010

Tangier Island

Hampton Roads

Strategic: Sea Level Rise (SLR)



A detailed view illustrates where the efforts are bringing solutions and where studies need to be done using the NACCS as a framework

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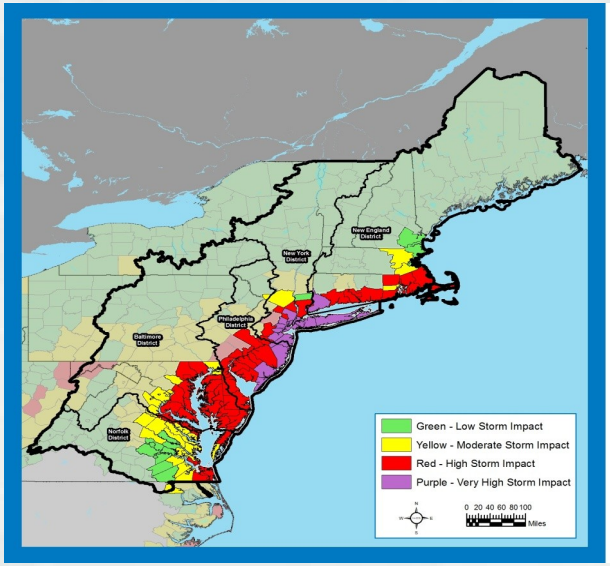
North Atlantic Coastal Comprehensive Study (NACCS)

"That using up to $20,000,000* of the funds provided herein, the Secretary shall conduct a comprehensive study to address the flood risks of vulnerable coastal populations in areas that were affected by Hurricane Sandy within the boundaries of the North Atlantic Division of the Corps …." (*19M after sequestration)

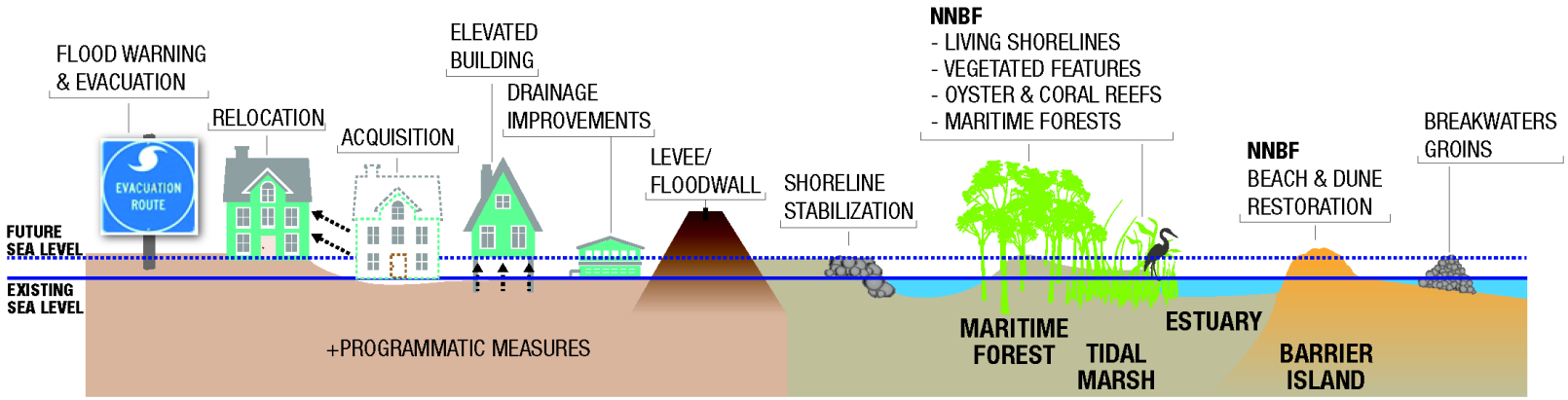


www.nad.usace.army.mil/CompStudy

Goals

- Provides a **Risk Management Framework – not a plan**
- Supports **Resilient Coastal Communities** and robust, sustainable coastal landscape systems
- **Considers future sea level rise scenarios**, to reduce risk to vulnerable population, property, ecosystems, and infrastructure
- Whole of Government Approach

NACCS Describes a Full Spectrum of Projects



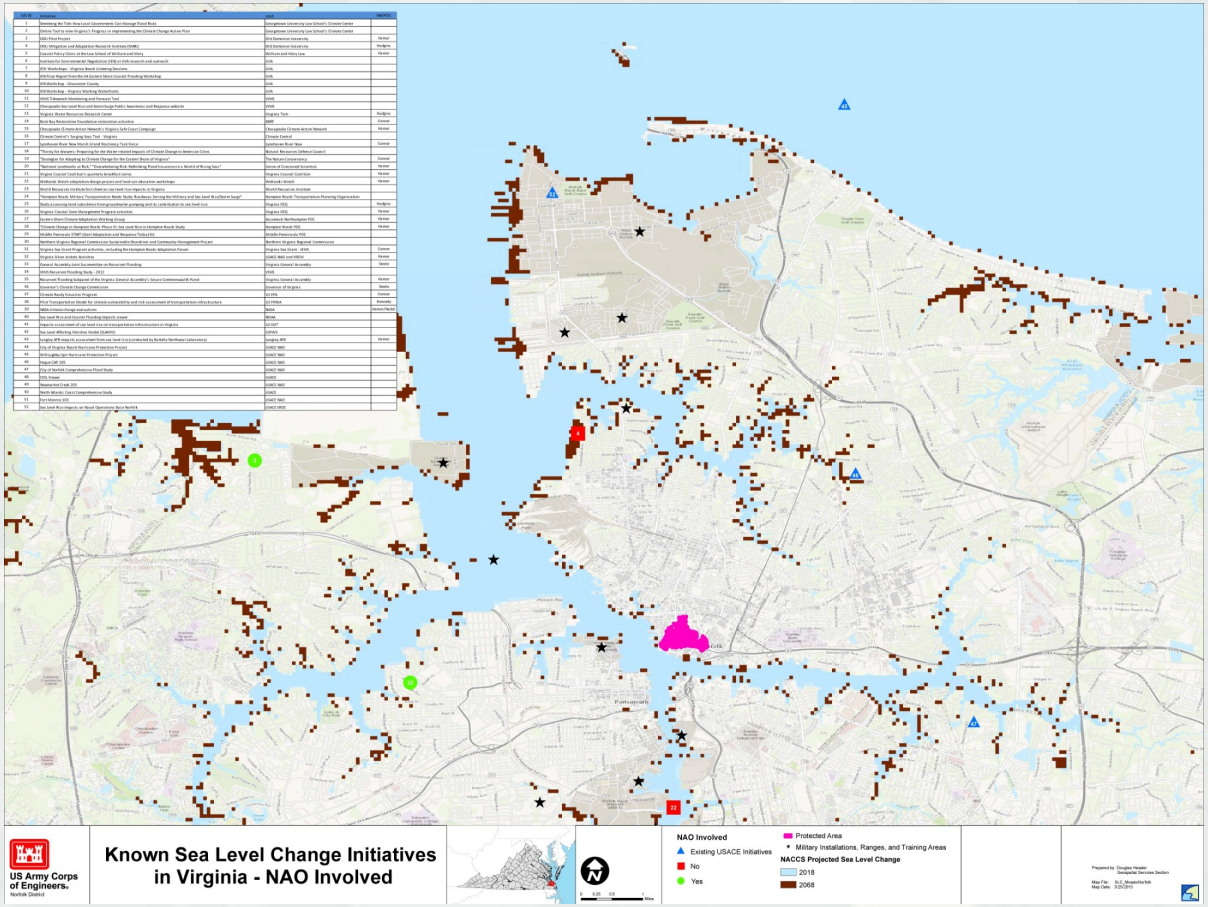
The NACCS Identified Norfolk

NACCS Identified nine focus areas

Three studies were funded for FY16 – one being Norfolk

Norfolk is ready to cost share the study

The Norfolk Study will Authorize “Projects”



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Authorized Projects Await Congressional Appropriations and Non Federal Cost Share

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Funded Projects are Constructed

Sandbridge Project
Virginia Beach

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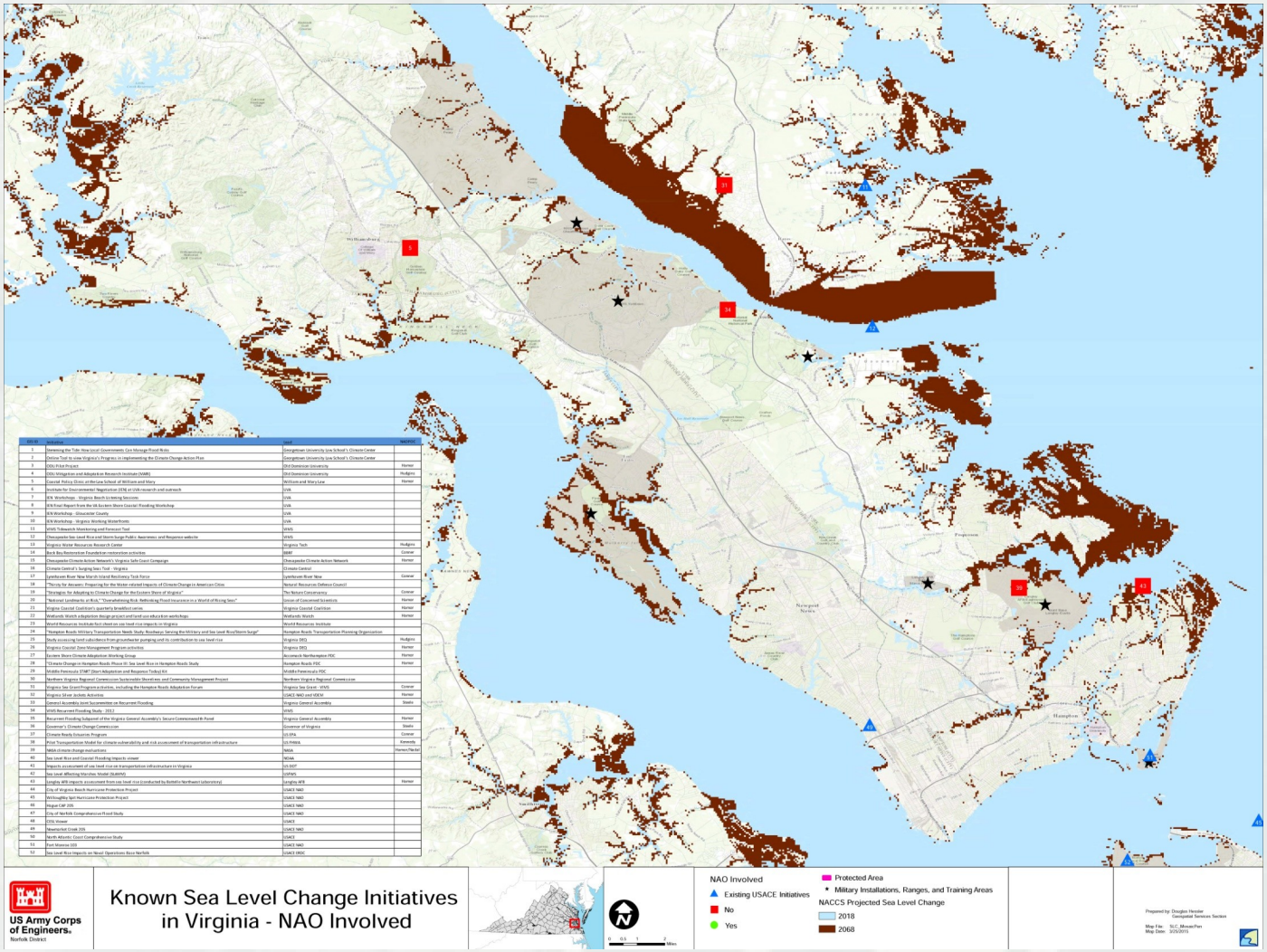
“The sea level rise fight starts right here, right now.”
April 10, 2015

Willoughby Spit

Our Future?

A Requirement for Leadership

Our Future?



A Geophysical Approach

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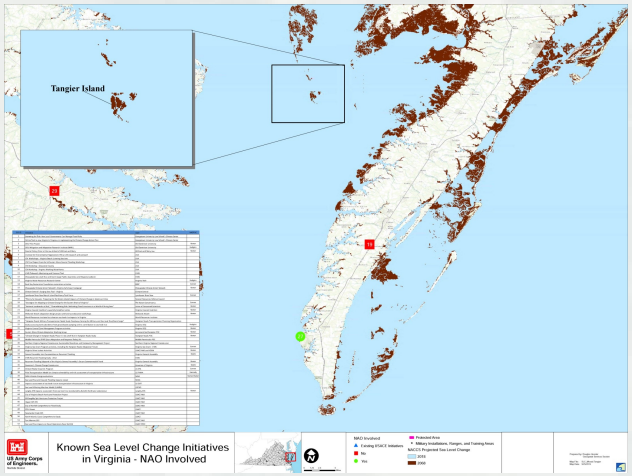
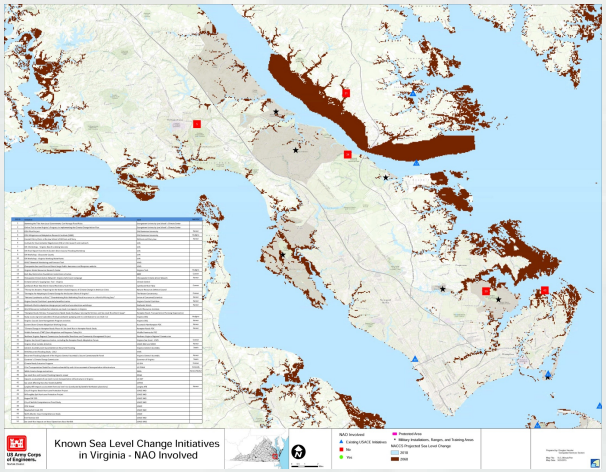
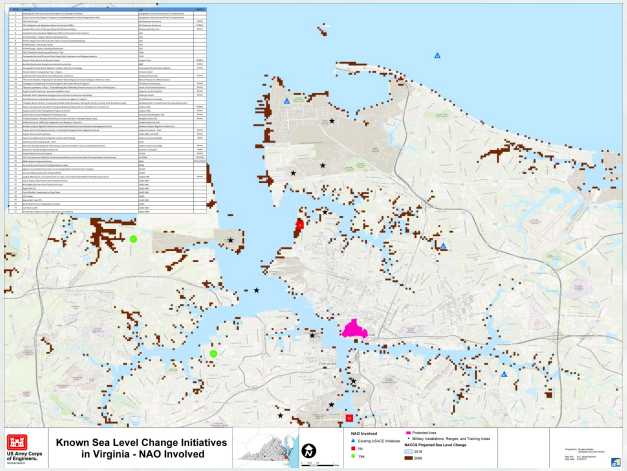
Our Future?







1. Identify Geophysical Regions
2. Prioritize Regions
3. Budget for Study Cost Share ($1.5M ea)
4. Budget for Projects (Studies and Constructi
5. Metrics and Milestones

A Strategic Campaign Plan

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Our Future?

A Spirit of Partnership

We Are Norfolk District
380 Dedicated Federal

At Your Service – Ready for your Questions

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